

Customer No. 24498
Attorney Docket #: RCA89086 US
Office Action Date: October 29, 2008

REMARKS

ALLOWED CLAIMS

Claims 4 – 10 have been allowed (see Office Action Summary, Item 5). It is noted that Claim 10 is also listed as "rejected" (Office Action Summary, Item 6). The latter is understood to be a typographical error in view of the former.

Claim 3 was indicated to be allowable if rewritten in independent form including all of the limitations of the base claim 1. Claim 3 has been amended accordingly and should therefore now also be allowed.

GROUND OF REJECTION

(1) Independent Claims 1, 11 and 12 have been rejected as unpatentable under 35 U.S.C. §103(a) over Eyer et al. (U.S. Patent 5,982,411) "in view of applicant's admitted prior art" ("AAPA").

The Examiner defines "AAPA" in the Rejection, paragraph 4, where the Examiner states:

"Applicant's admitted prior art discloses that packets from different streams have different transport protocols (pages 1-2; note: ATSC for terrestrial broadcasts has a different transport format than DSS for satellite broadcasts)."

SUMMARY OF THE CLAIMED SUBJECT MATTER

Each of the three independent claims (claims 1, 11 and 12) which has been rejected has been amended in this response. These amendments more distinctly point out aspects of the claims relating to the important feature of an adaptive transport decoder arranged for processing each one of plurality of (e.g. first and second) streams of packets, where each stream has a different transport protocol.

Each of the rejected independent claims 1, 11 and 12 also recites:

"a protocol decoder for extracting the respective payloads from the packets from each selected one of the (first and second – claims 11 and 12) packet stream sources according to said

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respective different (first and second – claims 11 and 12) transport protocols;”.

Furthermore, similarly to allowed claim 3, each of rejected independent claims 1, 11 and 12 has been amended to recite that the protocol decoder comprises a processor responsive to a plurality of (or “first and second”) control programs for processing the packets from the respective packet stream sources according to their respective transport protocols to extract respective payloads. Finally, the element of a further (e.g. “third”) control program for switching between the respective (e.g. “first and second”) programs for processing the packets has been included similarly to allowed claim 3.

The foregoing elements of each of the three rejected independent claims are shown and described in the application as follows.

In Fig. 1 of the application, an adaptive transport decoder processes at least two sources of streams of packets 12 and 14, the packets being arranged according to respectively different first and second transport protocols (data formats) (page 4, lines 1 – 12). Examples of two different transport protocols are illustrated schematically in Fig. 2 at “A” and “B” of the drawing (page 5, lines 1 – 6). In each of the illustrated transport protocols, each packet includes a “payload” (Fig. 2 and page 5, lines 13 – 16).

An example of a first packet stream source 12 is described (page 4, lines 6 – 8) as providing packets having a DSS (Direct Satellite System) transport packet protocol with a payload of 127 bytes in each payload (page 11, line 23). An example of a second packet stream source 14 is described (page 4, lines 11 – 12) as providing packets having a different ATSC (American Television Systems Committee) transport packet protocol with a payload of 184 bytes in each transport packet (page 11, lines 28 – 29). The different numbers of bytes in the payloads, along with other differences in byte sequences, require that a different decoder configuration be provided to decode each different protocol.

In the prior art, apparatus for processing such signals required a separate complete decoder for handling each different transport protocol. Applicant's solution is to provide an adaptive protocol decoder 30 (Fig. 1) coupled to, for example, first and second packet stream sources 10, 12 by a

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selector 20 which selects and couples either one of the sources 10, 12 to an input of decoder 30. The decoder 30 extracts the payloads from either selected one of the packet stream sources (page 4, lines 18 – 20) and processes the packet streams according to the respective different first and second transport protocols.

Details of an entire adaptive transport protocol decoder 30 suited for extracting payloads from each (e.g. "either") selected packet stream source according to its respective different (e. g. "first or second") transport protocol are shown, for example, in Fig. 3 and are described beginning at page 6, line 7 of the specification. Operating details of decoder 30 are described, for example, at page 14, line 16 through the end of page 16.

The § 103(a) Rejections of Claims 1, 11 and 12 Are Traversed

Applicants submit that the Rejection does not make out a *prima facie* case of obviousness with respect to any of the rejected independent apparatus Claims 1, 11 or 12.

The Examiner has acknowledged (Rejection, para. 4) that:

"Eyer does not disclose different transport protocols for the first and second packet streams".

It therefore necessarily follows that Eyer does not disclose a "protocol decoder for extracting respective payloads ---- according to said respective different first and second transport protocols" (see third structural element of each of the rejected independent claims, emphasis added).

In addition, the current amendment of each of claims 1, 11 and 12 incorporate language similar to that in allowed claim 3 relating to a plurality of "control programs" as discussed above further distinguishes the present invention over Eyer et al., either alone or in any possible combination with "AAPA".

The Examiner takes the position (paragraph 6) that:

"Applicant's admitted prior art discloses that packets from different streams have different transport protocols--. Therefore, it would be obvious to one skilled in the art at the time the

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invention was made to have different transport protocols in the invention of Eyer in order to provide data as related to the communication medium or by preference, as is known in the art--".

The mere fact that different transport streams, which have different transport protocols may have existed in the art does not bridge the gap between the structure disclosed in the rejected claims as pointed out above and what is disclosed by Eyer. That reference (Eyer) does not disclose the several structural elements of the claimed decoder apparatus for processing different streams having different transport protocols which are pointed out above as MISSING from Eyer. Moreover, those missing elements simply are not disclosed by "Applicant's admitted prior art (which) discloses that packets from different streams have different transport protocols----". Hypothetically, if Eyer et al. were to receive packets from different streams having different transport protocols, Eyer et al. never suggests or discloses the apparatus elements disclosed and claimed in Applicant's rejected claims 1, 11 and 12 or any elements for processing different transport protocols. Neither the missing claim elements nor the showing of a teaching, suggestion or motivation to combine such elements in the manner claimed are found in any purported combination of Eyer et al. plus "AAPA".

As indicated in the "Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in view of the Supreme Court Decision in KSR International Co. v. Teleflex, Inc." issued by the USPTO, dated October 3, 2007, absent either the claimed structural elements or the showing of a teaching, suggestion or motivation to combine such elements in the manner claimed, and a clear statement and rational analysis of its basis, an obviousness rejection cannot stand.

Since neither all of the claimed structural elements nor the "rationale" required by the KSR decision and the PTO Guidelines has been provided, there is no *prima facie* basis for an obviousness rejection of the independent claims 1, 11 and 12.

Applicants also respectfully submit that the rejection has not met the second and third requirements of the KSR decision to make factual inquiries as stated in the "Graham Analysis" quoted above i. e. "ascertaining

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the differences between the claimed invention and the prior art" and "resolving the level of ordinary skill in the pertinent art."

The Office Action has not stated all of the differences between what is presently claimed and what is disclosed in the Eyer et al. reference plus "AAPA". Assuming arguendo that such a combination is appropriate, the Office Action has failed to note there is no disclosure in such a combination of several of the structural elements of the claims. The several apparatus elements which are pointed out above as MISSING from Eyer et al. are likewise not disclosed by "Applicant's admitted prior art". According to the Office Action, "AAPA discloses that packets from different streams have different transport protocols----". That is simply not a disclosure of any of the claimed structural elements missing from Eyer et al.

Furthermore, the fact that "AAPA discloses that packets from different streams have different transport protocols" is not a teaching, suggestion or motivation to combine Eyer et al. with any structural elements in the manner claimed. The stated "rationale" for combining Eyer et al. with "AAPA" (i.e., "to have different transport protocols in the invention of Eyer in order to provide data as related to the communication medium or by preference, as is known in the art") is not a "clear articulation" of any reason(s) why the claimed invention would have been obvious" (*KSR* supra). It is therefore respectfully submitted that a *prima facie* case of obviousness has not been made out with respect to any of the independent Claims 1, 11 or 12.

The Disclosure of Eyer et al.

Eyer et al. is not directly concerned with image signal processing. Rather, Eyer et al. is concerned principally with a system for facilitating selecting television channels by "grouping channels which originate from a common programming service provider such as a television network" so as "to integrate programming services which are provided via different broadcast signals in different transmission paths" (Eyer et al., Column 1, lines 8 – 12). Because Eyer is interested principally in channel selection rather than image signal processing, he describes image signal processing mostly in general, rather than specific, terms. Eyer describes his system at col. 4, line

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23 as follows:

"A method and apparatus are presented for allowing a viewer to easily navigate television programs which are grouped according to a common service provider or other grouping criteria by depressing the "channel up" or "channel down" button on a hand held remote control or the like, thereby allowing a viewer to successively select the grouped channels regardless of the broadcast signal, transmission path and/or broadcast address in which the channel is carried."

Eyer et al. explains his terminology "transmission path" at col. 3, line 31 as follows:

"The transmission paths may include a direct broadcast satellite path, a cable distribution path, a terrestrial broadcast path and a multi-point microwave distribution system path, for example."

However, Eyer et al. does not disclose different digital transport protocols (acknowledged by the Examiner).

Eyer et al. repeatedly refers to a "broadcast address" (col. 3, line 15) as the parameter which is different for each channel. Eyer et al. states:

"The primary channel programming service is carried in a corresponding "broadcast address" which, for an analog signal may define a frequency spectrum and, for a digital signal, may define a transport stream including PID information as well as a frequency at which the transport stream is provided".

Eyer et al. further states at col. 3, line 45:

"PID data is provided to distinguish the programming services from one another in a packetized multiplexed digital transport stream".

All of the above relates simply to channel identification information. Thus, Eyer does not disclose different digital transport protocols and states that it is "broadcast address information (e. g. frequency and/or PID)" (col. 8, line 36; col. 7, line 66; see also col. 10, lines 29 – 51), that is different for each channel in his system and is provided from his CPU 275 to

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the tuner/demodulators 240, 250 and the digital processing function 265.

Eyer et al. does not provide any disclosure or suggestion of significant claim elements (different transport protocols for first and second packet streams, apparatus for processing such different protocols, etc. as pointed out above), which facts are acknowledged in part by the Office Action.

It is submitted that there is nothing in either Eyer et al. or "AAPA" which would lead one to combine the two. It is submitted that the Examiner's suggested incomplete combination has only been arrived at as a result of Applicant's teachings and inappropriate use of hindsight.

The rationale and reasoning required by the Patent Office Guidelines have not been provided and therefore no prima facie case of obviousness exists based on the combination of the cited art.

Accordingly, Applicant requests that the Office Action's rejection be withdrawn as to all of claims 1, 11 and 12, that claim 3 be allowed as indicated and that the application be held to be in condition for allowance.

Respectfully submitted,

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